

Message Text

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ACTION EUR-12

INFO OCT-01 EA-09 ISO-00 ACDA-10 CIAE-00 INR-07 IO-13 L-03

NSAE-00 NSC-05 EB-07 NRC-07 OES-06 FEAE-00 DODE-00

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R 141713Z APR 76

FM USMISSION EC BRUSSELS

TO ERDA WASHDC

INFO SECSTATE WASHDC 1001

USMISSION OECD PARIS

AMEMBASSY BONN

AMEMBASSY PARIS

AMEMBASSY LONDON

AMEMBASSY ROME

AMEMBASSY TOKYO

UNCLAS SECTION 1 OF 2 USMISSION EC BRUSSELS 03831/1

ERDA PASS TO SIEVERING,AIA,AND BAUER,NRA

E.O. 11652: N/A

TAGS: TECHN

SUBJECT: IEA WORKING GROUP MEETING ON HIGH TEMPERATURE REACTORS
FOR PROCESS HEAT

1. AS REQUESTED IN COMMERCIAL CABLE VANDERRYN TO RUBIN DATED MARCH 23, 1976,SOL ROSEN,ERDA/BRUSSELS,ATTENDED THE IEA INAUGURAL MEETING OF THE WORKING PARTY ON HIGH TEMPERATURE REACTORS FOR PROCESS HEAT HELD AT OECD ON APRIL 8. ROSEN ACCOMPANIED THE U.S DELEGATE,DR GLEN WENSCH,ERDA HEADQUARTERS, AT THE MEETING MINUTESWILL BE PREPARED AND DISTRIBUTED BY THE IEA SECRETARIAT. ACTION ITEMS AND ASSESSMENTS ARE REPORTED IN THIS CABLE ASSUME WENSCH WILL REPORT TO ERDA SEPARATELY.

2. THE PRIMARY MEETING OBJECTIVE WAS TO ESTABLISH A MECHANISM BY WHICH POTENTIAL OPPORTUNITIES FOR JOINT R AND D PROJECTS IN THE FIELD OF NUCLEAR PROCESS HEAT COULD BE IDENTIFIED AND UNDER-
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TAKEN. THE WORKING PARTY WAS COMPOSED OF DELEGATES FROM TEN COUNTRIES

GERMANY; U.S.,; U.K.; JAPAN; ITALY; AUSTRIA; IRELAND; SWITZERLAND;
SWEDEN; TURKEY, AS WELL AS THE EEC AND NEA. THE LEAD COUNTRY
DELEGATION WAS HEADED BY P.ENGELMAN,A DIRECTOR OF THE KFA LABORATORY,
JUELICH,GERMANY.
MR. ENGLEMAN CHAIRED THE MEETING.

3. THE FOLLOWING ACTION ITEMS WERE IDENTIFIED.ITEM 1- THE FRG
WILL SEND A QUESTIONNAIRE TO ALL WORKING PARTY MEMBERS REQUESTING
INFORMATION ON THE NEEDS AND REQUIREMENTS FOR HIGH
TEMPERATURE REACTOR FACILITIES IN THEIR RESPECTIVE COUNTRIES. THIS
SURVEY WOULD IDENTIFY THE OPTIMUM APPLICATION OF NUCLEAR PROCESS
HEAT WHICH WOULD BE OF INTEREST TO INDIVIDUAL MEMBER COUNTRIES.
ITEM 2 - THE FRG WILL PREPARE AND SEND OUT A QUESTIONNAIRE BY THE
END OF APRIL TO OBTAIN INFORMATION TO ENABLE THE JUELICH SYSTEMS
ANALYSIS GROUP TO OBTAIN INFORMATION TO ENABLE THE JUELICH SYSTEMS
ANALYSIS GROUP TO ESTABLISH STRATEGIES AND SCENARIOS FOR HTR
MARKET INTRODUCTION FOR BOTH PROCESS HEAT AND ELECTRICITY GENERATION.
THIS ANALYSIS IS TO ENABLE PREPARATION OF A COORDINATED OPTIMUM
BASIS FOR FACILITY INTRODUCTION TO REDUCE INDIVIDUAL RISKS.
RESPONSES ARE DUE BY MAY 31.ITEM 3 - A MEETING OF EXPERTS WILL
BE CONVENED END OF JUNE (SITE UNDESIGNATED) TO IDENTIFY PRIORITY
R AND D TASKS FOR IHX (INTERMEDIATE HEAT EXCHANGER) DEVELOPMENT.
THIS WOULD BE PRECEDED BY ISSUANCE OF A GUIDANCE DOCUMENT TO
BE DRAFTED IN JUELICH THE WEEK OF APRIL 12,WHICH WOULD DETAIL
IHX DEVELOPMENT PROGRAM NEEDS AND
REQUIREMENTS BASED UPON THIS DOCUMENT,A GROUP OF EXPERTS WOULD
DEFINE REQUIREMENTS FOR TESTING PROGRAMS AND IDENTIFY THE
ADEQUACY OF EXISTING TESTING FACILITIES OR THE ADVANTAGES OF
CONSTRUCTING A COMMON FACILITY TO CONDUCT JOINT RESEARCH.
NAMES OF EXPERTS ABLE TO PARTICIPATE IN JUNE MEETING ARE TO BE
SUBMITTED TO THE CHAIRMAN. ITEM 4 - THE WORKING GROUP IS SCHEDULED
TO RECONVENE ON THURSDAY SEPTEMBER 9, AT OECD TO REVIEW THE
RESULTS AND RECOMMENDATIONS OF THE EXPERTS' GROUP. SEPTEMBER 9
WAS CHOSEN SO AS TO PROCEED IEA ENERGY R AND D COMMITTEE MEETING
SCHEDULED FOR SEPT. 14.

4. ALTHOUGH THE DELIBERATIONS OF THE WORKING GROUP RESULTED IN
THE INITIAL WORK PROGRAM OUTLINED ABOVE,ROSEN CONCLUDES THAT
MEANINGFUL COOPERATION IN THE AREA OF NUCLEAR PROCESS HEAT WILL NOT
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BE EASILY OR READILY ACHIEVED OF THE FIVE COUNTRIES MAINTAINING
SIGNIFICANT DEVELOPMENT ACTIVITIES IN THE GAS REACTOR FIELD (U.S.,GERMANY, U.K., FRANCE AND JAPAN) ONLY THE GERMAN REPRESENTATIVES WERE IN A POSITION TO INDICATE THAT THEIR COUNTRY WAS
READY TO COMMIT TO A PROGRAM OF ACTION LEADING TO JOINT AND
COORDINATED DEVELOPMENT GOALS. THE U.K.
HAVING NO PLANS FOR GAS REACTOR DEVELOPMENT BEYOND THE AGR'S WAS
INVOLVED IN THE SUBJECT MEETING ESSENTIALLY AS AN OBSERVER.

IN THIS REGARD,THE U.K. DELEGATE EXPRESSED DOUBTS THAT HIS COUNTRY
COULD PARTICIPATE IN THE MAJOR HARDWARE ORIENTED PROJECT IDENTIFIED
IN ITEM 3ABOVE. FRANCE OF COURSE,WAS NOT REPRESENTED AT ALL.
LITTLE ENTHUSIASM WAS DISPLAYED BY THE JAPANESE DELEGATE WHO
ALSO INDICATED RESERVATIONS IN HIS COUNTRY'S ABILITY TO INVOLVE
ITSELF I ACTION ITEM 3. THE U.S DELEGATE,ALTHOUGH EXPRESSING
AN INTEREST IN NUCLEAR PROCESS HEAT,ALSO COULD NOT ASSUME AN
ACTIVE ROLE BECAUSE OF UNCERTAINTIES ASSOCIATED WITH THE REASSESS-
MENT OF THE GAS REACTOR PROGRAM CURRENTLY UNDERWAY IN THE U.S.
THIS LACK OF A WELL DEFINED U.S PROGRAM AND THE ABSENCE OF A
POSITIVE CONTRIBUTION BY THE U.S HAD A DAMPENING EFFECT ON THE
MEETING.

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5. THE LACK OF CONSENSUS AS TO THE OBJECTIVES OF HTR DEVELOPMENT
AND THUS THE ABSENCE OF COMMON AREAS WHERE OPTIMUM AND MUTUALLY
BENEFICIAL PROGRAMS CAN BE CONDUCTED IS AN ADDITIONAL ISSUE
ADVERSELY AFFECTING THE POTENTIAL FOR MEANINGFUL COOPERATION.
THE JAPANESE DELEGATE AS WELL AS THE DELEGATES FROM ITALY AND
SWEDEN INDICATED THAT THEIR COUNTRY'S MAIN GOALS WERE TO EMPLOY
PROCESS HEAT FOR STEEL MAKING AS OPPOSED TO COAL GASIFICATION

OR OTHER HIGH TEMPERATURE APPLICATIONS. THE GERMAN POSITION, HOWEVER, WAS STATED AS VIEWING NUCLEAR PROCESS HEAT UNITS AS TOO LARGE FOR STEEL MAKING. RATHER, IT WAS FELT THAT HTR'S SHOULD BE DEVELOPED FOR COAL GASIFICATION AND DISTRICT HEAT APPLICATIONS. THE U.K. DELEGATE ALSO MENTIONED THE EXISTENCE OF A SMALL HYDROGEN GRID IN THE U.K. WITH POTENTIAL FOR HIGH TEMPERATURE GAS PIPELINE APPLICATIONS. ON THE OTHER HAND, BOTH THE SWISS WHO ARE CONDUCTING JOINT DIRECT CYCLE ACTIVITIES WITH GERMANY, AND TURKEY ENVISION HTR'S FOR ELECTRICITY PRODUCTION. THIS IS IN DIRECT CONTRAST TO THE CURRENT OFFICIAL GERMAN GOVERNMENT POSITION. THE EEC DELEGATE INDICATED THAT HIS ORGANIZATION ENVISIONED A NEED FOR HTR'S BECAUSE THEY WOULD INTRODUCE A NEEDED

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DIVERSITY IN NUCLEAR TECHNOLOGY, ALLEVIATE POTENTIAL SITE AVAILABILITY PROBLEMS, (BECAUSE HTR'S ARE BETTER SUITED TO REGIONS OF HIGH POPULATION DENSITY) BUT, NEVERTHELESS, INDICATED THAT AFTER A FINAL MEETING TO BE HELD ON MAY 19 THE EEC WOULD PROBABLY COME OUT WITH A LUKEWARM ENDORSEMENT OF HTR'S AND A RATHER STRONG ENDORSEMENT OF THE FAST GAS REACTOR. THE EEC DELEGATE SUPPORTED BY THE SWISS ALSO INDICATED THAT PERHAPS PROCESSES SUCH AS THE AMMONIA CYCLE CAN UTILIZE LOWER TEMPERATURE NUCLEAR HEAT, THUS ELIMINATING SOME HIGH TEMPERATURE APPLICATIONS. IT THUS APPEARS THAT ACTION ITEM 1, WHICH SURVEYS PARTICIPANTS' NEEDS, MAY BE THE MOST IMPORTANT FIRST STEP IN ESTABLISHING A FRAMEWORK FOR MUTUALLY BENEFICIAL PROGRAMS AND THAT A SUCCESSFUL EFFORT WILL DEPEND UPON A CONVERGENCE OF IDEAS AMONGST INTERESTED PARTIES.

6. THIS SAME PROBLEM ALSO APPEARS DIRECTLY IN ACTION ITEM 3, WHICH IS INTENDED TO LEAD TO SUBSTANTIVE HARDWARE ORIENTED PROGRAMS. THE GERMAN DELEGATION CAME PREPARED WITH A PROPOSAL WHICH IDENTIFIED IHX DEVELOPMENT AS A PRIORITY R AND D TASK. NO OTHER TASKS WERE TABLED. JAPAN, U.K., SWITZERLAND, BELGIUM, AND TURKEY DID NOT EXPRESS INTEREST IN PROVIDING EXPERTS TO DEFINE JOINT COOPERATIVE EFFORTS IN THIS AREA. ON THE OTHER HAND, AUSTRIA, ITALY, EEC AND THE U.S. EXPRESSED INTEREST. HOWEVER, IT IS BY NO MEANS CLEAR THAT THIS DEVELOPMENT AREA SATISFIED U.S. NEEDS AND PRIORITIES AT THIS TIME OR MORE IMPORTANTLY, AFTER PROGRAM DEFINITION RESULTING FROM THE CURRENT ERDA RE-ASSESSMENT. (IHX DEVELOPMENT, FOR EXAMPLE, MAY BE DEEMED UNNECESSARY FOR THE LONG TERM.) IF THIS IS INDEED THE CASE, IT WILL BE ESSENTIAL FOR THE U.S. TO OFFER A COUNTER PROPOSAL AT SOME EARLY DATE IF WE DESIRE PROCESS HEAT TO BE A MEANINGFUL IEA PROJECT. IT HAS BEEN SUGGESTED BY THE IEA R AND D COMMITTEE, THAT ANY WORKING GROUP UNABLE TO FORMULATE SUBSTANTIVE PROJECTS WITHIN A 12-18 MONTH PERIOD BE DISSOLVED.

7. FINALLY IT IS NOTED THAT THE NEA-IEA JURISDICTIONAL DISPUTE SURFACED ON SEVERAL OCCASIONS FOR THE RECORD, THE NEA REPRESENTS

TATIVE SIMPLY NOTED A NUMBER OF TIMES THAT COOPERATION WITH NEA
SHOULD BE ENCOURAGED.
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